

# SCORE Search Results Details for Application 09961086 and Search Result 20080917\_142913\_us-09-961-086a-1.ra1.

<a href="#">Score Home</a>	<a href="#">Retrieve Application</a>	<a href="#">SCORE System</a>	<a href="#">SCORE</a>	<a href="#">Comments /</a>
<a href="#">Page</a>	<a href="#">List</a>	<a href="#">Overview</a>	<a href="#">FAQ</a>	<a href="#">Suggestions</a>

This page gives you Search Results detail for the Application 09961086 and Search Result 20080917\_142913\_us-09-961-086a-1.ra1.

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GenCore version 6.2.1  
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OM protein - protein search, using sw model

Run on: September 18, 2008, 22:07:19 ; Search time 74 Seconds  
(without alignments)  
1809.433 Million cell updates/sec

Title: US-09-961-086A-1  
Perfect score: 3352  
Sequence: 1 MSSSNVEVFIPVSGQNTNGF.....MIVIFLTIAYLKLFLKKYS 655

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1246758 seqs, 204424485 residues

Total number of hits satisfying chosen parameters: 1246758

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued\_Patents\_AA:\*  
1: /ABSS/Data/CRF/ptodata/2/iaa/5\_COMB.pep:\*  
2: /ABSS/Data/CRF/ptodata/2/iaa/6\_COMB.pep:\*  
3: /ABSS/Data/CRF/ptodata/2/iaa/7\_COMB.pep:\*  
4: /ABSS/Data/CRF/ptodata/2/iaa/H\_COMB.pep:\*  
5: /ABSS/Data/CRF/ptodata/2/iaa/PCTUS\_COMB.pep:\*  
6: /ABSS/Data/CRF/ptodata/2/iaa/RE\_COMB.pep:\*  
7: /ABSS/Data/CRF/ptodata/2/iaa/backfiles1.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed,

and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	% Query				ID	Description
	Score	Match Length	DB			
1	335.2	100.0	655	2	US-09-245-808-1	Sequence 1, Appli
2	333.1	99.4	655	2	US-09-767-594-1	Sequence 1, Appli
3	333.1	99.4	655	2	US-09-584-586-10	Sequence 10, Appl
4	333.1	99.4	655	3	US-09-856-927-2	Sequence 2, Appli
5	275.7	82.2	657	2	US-09-584-586-14	Sequence 14, App
6	835.5	24.9	1049	2	US-09-538-092-72	Sequence 72, Appi
7	835.5	24.9	1049	3	US-10-369-493-1520	Sequence 1520, Ap
8	81.2	24.2	687	3	US-09-619-049-264	Sequence 264, App
9	795.5	23.7	676	3	US-10-369-493-3799	Sequence 3799, Ap
10	706.5	21.1	674	2	US-09-538-092-1125	Sequence 1125, Ap
11	702.5	21.0	663	3	US-10-473-696-6	Sequence 6, Appli
12	702.5	21.0	663	3	US-11-567-079-6	Sequence 6, Appli
13	693.5	20.7	652	2	US-09-989-981A-2	Sequence 2, Appli
14	693.5	20.7	652	3	US-09-837-992-1	Sequence 1, Appli
15	693.5	20.7	652	3	US-11-128-026-1	Sequence 1, Appli
16	682.5	20.4	651	2	US-09-989-981A-6	Sequence 6, Appli
17	682.5	20.4	651	3	US-09-837-992-3	Sequence 3, Appli
18	682.5	20.4	651	3	US-11-128-026-3	Sequence 3, Appli
19	677	20.2	559	3	US-10-369-493-5740	Sequence 5740, Ap
20	664	19.8	608	3	US-10-369-493-5748	Sequence 5748, Ap
21	658.5	19.6	1095	3	US-10-369-493-2025	Sequence 2025, Ap
22	657.5	19.6	672	2	US-09-989-981A-4	Sequence 4, Appli
23	640.5	19.1	673	2	US-09-989-981A-8	Sequence 8, Appli
24	639	19.1	658	3	US-10-369-493-5347	Sequence 5347, Ap
25	636.5	19.0	639	3	US-10-369-493-6184	Sequence 6184, Ap
26	636.5	19.0	695	3	US-10-369-493-6199	Sequence 6199, Ap
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28	623	18.6	147	2	US-09-584-586-12	Sequence 12, Appl
29	623	18.6	147	3	US-09-856-927-4	Sequence 4, Appli
30	612.5	18.3	1501	2	US-09-487-558B-346	Sequence 346, App
31	612.5	18.3	1501	3	US-10-369-493-1606	Sequence 1606, Ap
32	602	18.0	1511	2	US-09-487-558B-250	Sequence 250, App
33	602	18.0	1511	3	US-10-369-493-22380	Sequence 22380, A
34	594	17.7	1564	2	US-09-487-558B-244	Sequence 244, App
35	594	17.7	1564	3	US-10-369-493-22424	Sequence 22424, A
36	589	17.6	1549	3	US-10-369-493-3919	Sequence 3919, Ap
37	580.5	17.3	1529	3	US-10-369-493-1692	Sequence 1692, Ap
38	567	16.9	617	2	US-09-614-912-138	Sequence 138, App
39	561.5	16.8	1395	3	US-10-369-493-4054	Sequence 4054, Ap
40	552.5	16.5	611	3	US-10-369-493-12397	Sequence 12397, A
41	544	16.2	1511	3	US-10-369-493-22496	Sequence 22496, A
42	538	16.1	1448	3	US-10-369-493-3997	Sequence 3997, Ap
43	537.5	16.0	560	3	US-10-369-493-12899	Sequence 12899, A
44	537	16.0	1296	2	US-09-614-912-140	Sequence 140, App
45	533.5	15.9	1627	3	US-10-369-493-3838	Sequence 3838, Ap

## ALIGNMENTS

## RESULT 1

US-09-245-808-1

; Sequence 1, Application US/09245808

; Patent No. 6313277

; GENERAL INFORMATION:

; APPLICANT: Doyle, L. Austin

; APPLICANT: Abruzzo, Lynne V.

; APPLICANT: Ross, Douglas D.

; TITLE OF INVENTION: Breast Cancer Resistance Protein (BCRP) and DNA which

; TITLE OF INVENTION: encodes it

; FILE REFERENCE: Ross UMb conversion

; CURRENT APPLICATION NUMBER: US/09/245,808

; CURRENT FILING DATE: 1999-02-05

; EARLIER APPLICATION NUMBER: 60/073763

; EARLIER FILING DATE: 1998-02-05

; NUMBER OF SEQ ID NOS: 7

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 1

; LENGTH: 655

; TYPE: PRT

; ORGANISM: Human MCF-7/AdrVp cells

US-09-245-808-1

Query Match 100.0%; Score 3352; DB 2; Length 655;  
 Best Local Similarity 100.0%; Pred. No. 0;  
 Matches 655; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db	1	MSSSNVEVFIPVSQGNINGFPATASNDLKAFTEGAVLSFHNICYRVKLKSGFLPCRKPVE	60
Qy	61	KEILSNINGIMKPLNAILGPTGGGKSSLLDVLAARKDPSGLSGDVLINGAPRPANFKCN	120
Db	61	KEILSNINGIMKPLNAILGPTGGGKSSLLDVLAARKDPSGLSGDVLINGAPRPANFKCN	120
Qy	121	SGYVVQDDVVMGTLTVRENLFQFSAALRLATTMTNHEKNERINRVIQELGLDKVADSKVGT	180
Db	121	SGYVVQDDVVMGTLTVRENLFQFSAALRLATTMTNHEKNERINRVIQELGLDKVADSKVGT	180
Qy	181	QFIRGVSGGERKRTSIGMELITDPSILFLDEPTTGLDSSTANAVLLLLKRMSKQGRTIIF	240
Db	181	QFIRGVSGGERKRTSIGMELITDPSILFLDEPTTGLDSSTANAVLLLLKRMSKQGRTIIF	240
Qy	241	SIHQPRYSIFKLFDSLTLASGRLMFHGPAQEALGYFESAGYHCEAYNNPADFFLDIING	300
Db	241	SIHQPRYSIFKLFDSLTLASGRLMFHGPAQEALGYFESAGYHCEAYNNPADFFLDIING	300

Qy	301	DSTAVALNREEDFKATEIIIEPSKQDKPLIEKLAEIYVNSSFFYKETKAELHQLSGGEKKKK	360
Db	301	DSTAVALNREEDFKATEIIIEPSKQDKPLIEKLAEIYVNSSFFYKETKAELHQLSGGEKKKK	360
Qy	361	ITVFKEISYTTSFCHQLRWVSKRSFKNLLGNPQASIAQIIVTVVLGLVIGAIYFGLKND	420
Db	361	ITVFKEISYTTSFCHQLRWVSKRSFKNLLGNPQASIAQIIVTVVLGLVIGAIYFGLKND	420
Qy	421	TGIQNRAGVLFLLTTNQCFSSVSAVELFVVEKKLFIHEYISGYRVSSYFLGKLLSDLLP	480
Db	421	TGIQNRAGVLFLLTTNQCFSSVSAVELFVVEKKLFIHEYISGYRVSSYFLGKLLSDLLP	480
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Db	481	MTMLPSIIFTCIVYFMLGLKPKADAFFVMMFTLMMVAYSASSMALAIAAGQSVSVATLL	540
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Db	541	MTICFVFMIMFSGLLVNLTTIASWSLSWLQYFSIPRYGFTALQHNEFLGQNFPCPLNATGN	600
Qy	601	NPCNYATCTGEEYLVKQGIDLSPWGLWKNHVALACMIVIFLTIAYLKLFLKKY	655
Db	601	NPCNYATCTGEEYLVKQGIDLSPWGLWKNHVALACMIVIFLTIAYLKLFLKKY	655

## RESULT 2

US-09-767-594-1

; Sequence 1, Application US/09767594

; Patent No. 6521635

; GENERAL INFORMATION:

; APPLICANT: Bates, Susan

; APPLICANT: Robey, Robert

; APPLICANT: The Government of the United States of America

; APPLICANT: as represented by the Secretary of the

; APPLICANT: Department of Health and Human Services

; TITLE OF INVENTION: Inhibition of MXR Transport by Acridine Derivatives

; FILE REFERENCE: 015280-402100US

; CURRENT APPLICATION NUMBER: US/09/767,594

; CURRENT FILING DATE: 2001-01-22

; PRIOR APPLICATION NUMBER: US 60/177,410

; PRIOR FILING DATE: 2000-01-20

; NUMBER OF SEQ ID NOS: 2

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 1

; LENGTH: 655

; TYPE: PRT

; ORGANISM: Homo sapiens

; FEATURE:

; OTHER INFORMATION: human mitoxanthrone resistance (MXR)/BRCP/ABCP

; OTHER INFORMATION: protein

US-09-767-594-1

Query Match 99.4%; Score 3331; DB 2; Length 655;  
 Best Local Similarity 99.4%; Pred. No. 0;  
 Matches 651; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

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Db      1  MSSSNVEVFIPVSQGNTNGFFATVSNDLKAFTEGAVLSFHNICYRVKLKSGFLPCRKPVE 60

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      |||
Db     61  KEILSNINGIMKPLGNAILGPTGGGKSSLLDLAARKDPSGLSGDVLINGAPRPANFKCN 120

Qy    121  SGYVVQDDVVMGTLTVRENLFQSAALRLATTMTNHEKNERINRVIELGLDKVADSKVGT 180
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Db    121  SGYVVQDDVVMGTLTVRENLFQSAALRLATTMTNHEKNERINRVIEELGLDKVADSKVGT 180

Qy    181  QFIRGVSGGERKRTSIGMELITDPSILFLDEPTTGLDSSTANAVLLLLKRMSKQGRTIIF 240
      |||
Db    181  QFIRGVSGGERKRTSIGMELITDPSILSLDEPTTGLDSSTANAVLLLLKRMSKQGRTIIF 240

Qy    241  SIHQPRYSIFKLFDSLTLASGRLMFHGPAQEALGYFESAGYHCEAYNNPADFFLDIING 300
      |||
Db    241  SIHQPRYSIFKLFDSLTLASGRLMFHGPAQEALGYFESAGYHCEAYNNPADFFLDIING 300

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      |||
Db    301  DSTAVALNREEDFKATEIIEPSKQDKPLIEKLAEIYVNSSFYKETKAELHQLSGGEKKKK 360

Qy    361  ITVFKEISYTTSFCHQLRWVSKRSFKNLLGNPQASIAQIIVTVVLGLVIGAIYFGLKND 420
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Db    421  TGIQNRAGVLFLLTTNQCFSVSAVELFVVEKKLFIHEYISGYRVSSYFLGKLSDLLP 480

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Db    481  MRMLPSIIFTCTIVYFMLGLKPKADAFFVMMFTLMMVAYSASSMALAIAAGQSVSVATLL 540

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Qy    601  NPCNYATCTGEEYLVKQGIDLSPWGLWKNHVALACMIVIFLTIAYLKLFLKKYS 655
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Db    601  NPCNYATCTGEEYLVKQGIDLSPWGLWKNHVALACMIVIFLTIAYLKLFLKKYS 655

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RESULT 3

US-09-584-586-10

; Sequence 10, Application US/09584586

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; Patent No. 6933150
; GENERAL INFORMATION:
; APPLICANT: Sorrentino, Brian
; APPLICANT: Bunting, Kevin
; TITLE OF INVENTION: EXPANSION OF HEMATOPOIETIC STEM CELLS TRANSDUCED WITH
; TITLE OF INVENTION: MDR-1 METHODS OF USE THEREOF
; FILE REFERENCE: 1340-1-021CIP
; CURRENT APPLICATION NUMBER: US/09/584,586
; CURRENT FILING DATE: 2000-05-31
; EARLIER APPLICATION NUMBER: US 60/086,988
; EARLIER FILING DATE: 1998-05-28
; EARLIER APPLICATION NUMBER: PCT/US99/11825
; EARLIER FILING DATE: 1999-05-27
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 655
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-584-586-10

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Query Match          99.4%; Score 3331; DB 2; Length 655;
Best Local Similarity 99.4%; Pred. No. 0;
Matches 651; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

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Qy	61	KEILSNINGIMKPLGNAILGPTGGGKSSLLDVLAARKDPSGLSGDVLINGAPRPANFKCN	120
Db	61	KEILSNINGIMKPLGNAILGPTGGGKSSLLDVLAARKDPSGLSGDVLINGAPRPANFKCN	120
Qy	121	SGYVVQDDVVMGTLTVRENQLFSAALRLATTMTNHEKNERINRVIQELGLDKVADSKVGT	180
Db	121	SGYVVQDDVVMGTLTVRENQLFSAALRLATTMTNHEKNERINRVIQELGLDKVADSKVGT	180
Qy	181	QFIRGVSGGERKRTSIGMELITDPSILFDEPTTGLDSSTANAVLLLLKRMSKQGRTIIF	240
Db	181	QFIRGVSGGERKRTSIGMELITDPSILSLDEPTTGLDSSTANAVLLLLKRMSKQGRTIIF	240
Qy	241	SIHQPRYSIFKLFDSLTLASGRLMFHGPAQEALGYFESAGYHCEAYNNPADFFLDIING	300
Db	241	SIHQPRYSIFKLFDSLTLASGRLMFHGPAQEALGYFESAGYHCEAYNNPADFFLDIING	300
Qy	301	DSTAVALNREEDFKATEIIEPSKQDKPLIEKLAIEYVNSSFYKETKAELHQLSGGEKKKK	360
Db	301	DSTAVALNREEDFKATEIIEPSKQDKPLIEKLAIEYVNSSFYKETKAELHQLSGGEKKKK	360
Qy	361	ITVFKIEISYTSFCHQLRWVSKRSFKNLLGNPQASIAQIIIVTVVLGLVIGAIYFGLKND	420
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Db      481  MRMLPSIIIFTCIVYFMLGLKPKADAFFVMMFTLMMVAYSASSMALAIAAGQSVSVATLL 540

Qy      541  MTICFVFMIFSGLLVNLTTIASWLSWLQYFSIPRYGFTALQHNEFLGQNFPCPLNATGN 600
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Db      541  MTICFVFMIFSGLLVNLTTIASWLSWLQYFSIPRYGFTALQHNEFLGQNFPCPLNATGN 600

Qy      601  NPCNYATCTGEEYLVKQGIDLSPWGLWKNHVALACMIVIFLTTIAYLKLFLKKYS 655
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Db      601  NPCNYATCTGEEYLVKQGIDLSPWGLWKNHVALACMIVIFLTTIAYLKLFLKKYS 655

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## RESULT 4

US-09-856-927-2

; Sequence 2, Application US/09856927

; Patent No. 7138493

; GENERAL INFORMATION:

; APPLICANT: Dean, Michael

; APPLICANT: Allikmets, Rando

; APPLICANT: Bates, Susan E.

; APPLICANT: Fojo, Antonio T.

; APPLICANT: The Government of the United States of America

; APPLICANT: as represented by the Secretary of the

; APPLICANT: Department of Health and Human Services

; TITLE OF INVENTION: A No. 7138493el ATP-Binding Cassette Protein Responsible for

; TITLE OF INVENTION: Cytotoxin Resistance

; FILE REFERENCE: 015280-382100US

; CURRENT APPLICATION NUMBER: US/09/856,927

; CURRENT FILING DATE: 2001-05-29

; PRIOR APPLICATION NUMBER: US 60/110,473

; PRIOR FILING DATE: 1998-11-30

; PRIOR APPLICATION NUMBER: WO PCT/US99/28107

; PRIOR FILING DATE: 1999-11-24

; NUMBER OF SEQ ID NOS: 6

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 2

; LENGTH: 655

; TYPE: PRT

; ORGANISM: Homo sapiens

US-09-856-927-2

Query Match 99.4%; Score 3331; DB 3; Length 655;

Best Local Similarity 99.4%; Pred. No. 0;

Matches 651; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

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Db      61  |KEILSNINGIMKPLGNAILGPTGGGKSSLLDVLAAARKDPSGLSGDVLINGAPRPANFKCN 120
Qy     121  |SGYVVQDDVVMGTLTVRENLFQSAALRLATTMTNHEKNERINRVIQELGLDKVADSKVGT 180
Db     121  |SGYVVQDDVVMGTLTVRENLFQSAALRLATTMTNHEKNERINRVIQELGLDKVADSKVGT 180
Qy     181  |QFIRGVSGGERKRTSIGMELITDPSILFLDEPTTGLDSSTANAVLLLLKRMSKQGRTIIF 240
Db     181  |QFIRGVSGGERKRTSIGMELITDPSILSLDEPTTGLDSSTANAVLLLLKRMSKQGRTIIF 240
Qy     241  |SIHQPRYSIFKLFDSLTLASGRLMFHGPAQEALGYFESAGYHCEAYNNPADFFLDIING 300
Db     241  |SIHQPRYSIFKLFDSLTLASGRLMFHGPAQEALGYFESAGYHCEAYNNPADFFLDIING 300
Qy     301  |DSTAVALNREEDFKATEIIEPSKQDKPLIEKLAEIYVNSSFYKETKAELHQLSGGEKKKK 360
Db     301  |DSTAVALNREEDFKATEIIEPSKQDKPLIEKLAEIYVNSSFYKETKAELHQLSGGEKKKK 360
Qy     361  |ITVFEKISYTTSFCHQLRWVSKRSFKNLLGNPQASIAQIIVTVVLGLVIGAIYFGLKND 420
Db     361  |ITVFEKISYTTSFCHQLRWVSKRSFKNLLGNPQASIAQIIVTVVLGLVIGAIYFGLKND 420
Qy     421  |TGIQNRAGVLFLLTTNQCFSSVSAVELFVVEKKLFIHEYISGYRVSSYFLGKLLSDLLP 480
Db     421  |TGIQNRAGVLFLLTTNQCFSSVSAVELFVVEKKLFIHEYISGYRVSSYFLGKLLSDLLP 480
Qy     481  |MTMLPSIIFTCTIVYFMLGLKPKADAFFVMMFTLMMVAYSASSMALAIAAGQSVSVATLL 540
Db     481  |MRMLPSIIFTCTIVYFMLGLKPKADAFFVMMFTLMMVAYSASSMALAIAAGQSVSVATLL 540
Qy     541  |MTICFVFMIFSGLLVNLTTIASWLSWLQYFISIPRYGFTALQHNEFLGQNFPCPLNATGN 600
Db     541  |MTICFVFMIFSGLLVNLTTIASWLSWLQYFISIPRYGFTALQHNEFLGQNFPCPLNATGN 600
Qy     601  |NPCNYATCTGEEYLKQGIDLSPWGLWKNHVALACMIVIFLTIAYLKLFLKKEYS 655
Db     601  |NPCNYATCTGEEYLKQGIDLSPWGLWKNHVALACMIVIFLTIAYLKLFLKKEYS 655

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## RESULT 5

US-09-584-586-14

; Sequence 14, Application US/09584586

; Patent No. 6933150

; GENERAL INFORMATION:

; APPLICANT: Sorrentino, Brian

; APPLICANT: Bunting, Kevin

; TITLE OF INVENTION: EXPANSION OF HEMATOPOIETIC STEM CELLS TRANSDUCED WITH



```

; TITLE OF INVENTION: MDR-1 METHODS OF USE THEREOF
; FILE REFERENCE: 1340-1-021CIP
; CURRENT APPLICATION NUMBER: US/09/584,586
; CURRENT FILING DATE: 2000-05-31
; EARLIER APPLICATION NUMBER: US 60/086,988
; EARLIER FILING DATE: 1998-05-28
; EARLIER APPLICATION NUMBER: PCT/US99/11825
; EARLIER FILING DATE: 1999-05-27
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 14
;   LENGTH: 657
;   TYPE: PRT
;   ORGANISM: Mus musculus
US-09-584-586-14

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Query Match      82.2%; Score 2757; DB 2; Length 657;
Best Local Similarity 81.5%; Pred. No. 3.2e-278;
Matches 536; Conservative 51; Mismatches 67; Indels 4; Gaps 3;

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Db      1 MSSSNDHVLVPMQSRNNNGLPRMNSRAVRTLAEGDVLFSFHHITYRVKVKSGFL-VRKTVE 59

Qy     61 KEILSNINGIMKPGLNAILGPTGGGKSSLLDVLAAARKDPSSGLSGDVLINGAPRPANFKCN 120
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Db     60 KEILSDINGIMKPGLNAILGPTGGGKSSLLDVLAAARKDPKGLSGDVLINGAPQPAHFKCC 119

Qy     121 SGYVVQDDVVMGILTVRENILQFSAALRLATTMTNHEKNERINRVIQELGLDKVADSKVGT 180
      |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db     120 SGYVVQDDVVMGILTVRENILQFSAALRLPTTMKNHEKNERINTIIKELGLEKVDKSKVGT 179

Qy     181 QFIRGVSGGERKRTSIGMELITDPSILFLDEPTTGLDSSTANAVLLLLKRMSKQGRTIIF 240
      |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db     180 QFIRGISGGERKRTSIGMELITDPSILFLDEPTTGLDSSTANAVLLLLKRMSKQGRTIIF 239

Qy     241 SIHQPRYSIFKLFDSLTLASGRLMFHGPAQEALGYFESAGYHCEAYNNPADFFLDIING 300
      |||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||:|||||
Db     240 SIHQPRYSIFKLFDSLTLASGKLVFHGPAQKALEYFASAGYHCEPYNNPADFFLDVING 299

Qy     301 DSTAVALNREE-DFKATEIIIEPSKQDKPLIEKLAIEIVNSSFYKETKAELHQLSGGEKKK 359
      ||:| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     300 DSSAVMLNREEQDNEANKTEEPSKGEKPVNIENLSEFYINSAIYGETKAELDQLPGAQEKK 359

Qy     360 KITVFKEISYTTSFCHQLRWVSKRSFKNLLGNPQASIAQIIVTVVLGLVIGAIYFGLKND 419
      : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     360 GTSAPKEPVVYTSFCHQLRWIARRSFKNLLGNPQASVAQLIVTVILGLIIGAIYFDLYD 419

Qy     420 STGIQNRAGVLFLLTTNQCFSSVSARELVVVEKKLFIHEYISGYRVSSYFLGKLLSDLL 479
      : | : | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Db     420 AAGMQNRAGVLFLLTTNQCFSSVSARELVVVEKKLFIHEYISGYRVSSYFFGKVMSDL 479

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; Sequence 72, Application US/09538092
; Patent No. 6753314
; GENERAL INFORMATION:
; APPLICANT: Giot, Loic
; APPLICANT: Mansfield, Traci A.
; TITLE OF INVENTION: Protein-Protein Complexes and Method of Using Same
; FILE REFERENCE: 15966-542
; CURRENT APPLICATION NUMBER: US/09/538,092
; CURRENT FILING DATE: 2000-03-29
; PRIOR APPLICATION NUMBER: 60/127,352
; PRIOR FILING DATE: 1999-04-01
; PRIOR APPLICATION NUMBER: 60/178,965
; PRIOR FILING DATE: 2000-02-01
; NUMBER OF SEQ ID NOS: 1387
; SOFTWARE: CuraPatSeqFormatter Version 0.9
; SEQ ID NO 72
; LENGTH: 1049
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (0)...(0)
; OTHER INFORMATION: Polypeptide Accession Number YCR011C
US-09-538-092-72
```

Query Match	24.9%;	Score 835.5;	DB 2;	Length 1049;
Best Local Similarity	30.5%;	Pred. No. 4.5e-77;		
Matches	222;	Conservative 134;	Mismatches 257;	Indels 115; Gaps 18;

Qy	1	MSSSNVEVFIPVSQGNTNGFPATASNDLKAFTEGAVLSFHNICYRVKLSKGF LPCRKPVE	60
		:    : :   :   :           :	
Db	355	LGSSKSPIRLP-DEDAVNFLQNEDDTL-----ATLSFENITYSVPSINS-----DGVE	402
Qy	61	KEILSNINGIMKGP-LNAILGPTGGGKSSLLDLVAARKDPSSGLSGDVLINGAPRP-ANFK	118
		: :   :   :   :   :   :   :   :   :   :   :   :   :   :   :	
Db	403	ETVLNEISGIVKPGQILAIMGGSGAGKTTLLDILAMKRKTGHVSGSKVNGISMDRKSFS	462

```

Qy      119  CNSGYVVQDDVVMGTLTVRENQLQFSAALRLATTMTNHEKNERINRVIQELGLDKVADSKV 178
      :| | | | :| | | | : | | | | : | | :| :| :| :| :| :| :
Db      463  KIIGFVDQDDFLFLPTLVFETVLNSALLRLPKALSFEAKKARVYKVLEELRIIDIKDRII 522

Qy      179  GTQFIRGVSGGERKRTSIGMELITDPSILFDEPTTGLDSSSTANAVLLLLKRMSKQ-GRT 237
      | :| | | :| | | | :| | | | :| | | | :| | | :| | | | |
Db      523  GNEFDRGISGGEKRRVSIACELVTSPVLFLFDEPTSGLDASNANNVIECLVRLSSDYNRT 582

Qy      238  IIFSIIHQPRYSIFKLFDSLTLASGRLMFHGPAQEALGYFESAGYHCEAYNPNADFFLDI 297
      : :| | | | :| | | | :| | | : :| :| :| :| :| :| :| :|
Db      583  LVLSIIHQPRSNIFYLFDKVLVLSKGMVYSGNAKKVSEFLRNEGYICPDNYNIADYLIDI 642

Qy      298  -----INGDSTAV 305
      : |
Db      643  TFEAGPQGKRRIRIRNISDLEAGTDTNDIDNTIHQTFTTSSDGTQREWAHLAAHRDEIRS 702

Qy      306  ALNREEDFKATE----IIEPSKQDKPLIEKLAIEYVNSSFYKETAKELHQ--LSGGEKKKK 360
      | | | :| :| | | | :| :| :| :| :| :| :| :| :| :| :| :
Db      703  LLRDEEDVEGTGRRGATEIDLNTKLLHDK---YKDSVYYAELSQEIEEVLSEGDEESN 758

Qy      361  IT--VFKEISYTTSFCHQLRWVSKRSFKNLLGNPQASIAQIIVTVVLGLVIGAIYFGLKN 418
      : | | :| | | | :| :| :| :| :| :| :| :| :| :| :| :| :
Db      759  VLNGDLPTGQQSAGFLQQLSILNSRSFKNMYRNPKLLLGNYLLITILLSLFLGTLYYNVSN 818

Qy      419  DSTGIQNAGVLFLLTTNQCFSSSAVELFVVEKKLFIHEYISGYYRVSSYFLGKLSDL 478
      | :| | | | :| | | :| :| :| :| :| :| :| :| :| :| :| :
Db      819  DISGFQNRMGFLFFILTYFGFVTFGLSSFALERIIFIKERSNNYYSPLAYYISKIMSEV 878

Qy      479  LPMTMLPSIIFTCIVYFMLGLKPKADAFVMMFTLMMVAYSASSMALAIAAGQSVVSVAT 538
      :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :
Db      879  VPLRVVPPILLSLIVPMTGLNMKDAPFKCIGILILFNLGISLEILTIGIIFEDLNNSI 938

Qy      539  LLMTICFVFMFMIFSGLLV---NLTTIASWLSWLQYFSIPRYGFTALQHNEF----- 586
      :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :| :
Db      939  ILSVLVLLSGLLFSGFLINTKNITNVA--FKYLNKFSVFYYAYESLLINEVKTLMLKERE 996

Qy      587  LGQNF-CPGLNATGNNPCNYATCTGEEYLVKQGI--DLSPWGLWKNHVALACMIVIFLTI 643
      | | | | | | | | | | :| :| :| :| :| :| :| :| :| :| :
Db      997  YGLNIEVPG-----ATILSTFGFVVQNLVFDIK-----ILALFNVVFLIM 1036

Qy      644  AYLKLLFL 651
      | | | :|
Db      1037  GYLALKWI 1044

```

## RESULT 7

US-10-369-493-1520

; Sequence 1520, Application US/10369493

; Patent No. 7314974

; GENERAL INFORMATION:

; APPLICANT: Cao, Yongwei

; APPLICANT: Hinkle, Gregory J.

```

; APPLICANT: Slater, Steven C.
; APPLICANT: Goldman, Barry S.
; APPLICANT: Chen, Xianfeng
; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF
; TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES
; FILE REFERENCE: 38-10(52052)B
; CURRENT APPLICATION NUMBER: US/10/369,493
; CURRENT FILING DATE: 2003-02-28
; PRIOR APPLICATION NUMBER: US 60/360,039
; PRIOR FILING DATE: 2002-02-21
; NUMBER OF SEQ ID NOS: 47374
; SEQ ID NO 1520
; LENGTH: 1049
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-10-369-493-1520

```

```

Query Match          24.9%; Score 835.5; DB 3; Length 1049;
Best Local Similarity 30.5%; Pred. No. 4.5e-77;
Matches 222; Conservative 134; Mismatches 257; Indels 115; Gaps 18;

```

```

Qy      1 MSSSNVEVFIPVSGQNGINGFPATASNDLKAFTEGAVLSFHNICYRVKLKSGFLPCRKPVE 60
      : || : : | : | : | : | : | : | : | : | : | : | : | : | : |
Db      355 LGSSKSPIRLP-DEDAVNNFLQNEDDL-----ATLSFENITYSVPSINS-----DGVE 402

Qy      61 KEILSNINGIMKPG-LNAILGPTGGGKSSLLDVLARKDPGSLSGDVLINGAPRP-ANFK 118
      : : | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
Db      403 ETVLNEISGIVKPGQILAIMGGSGAGKTTLLDILAMKRKTGHVSGSIKVGNGISMDRKSFS 462

Qy      119 CNSGYVVQDDVVMGTLTVRENLFQSAALRLATTMTNHEKNERINRVIQELGLDKVADSKV 178
      | : | ||| : : ||| | : | ||| : : | : : : | : : | : : | : : |
Db      463 KIIGFVDQDDFLPTLTVFETVLNSALLRLPKALSFEAKKARVYKVEELRIIDIKDRII 522

Qy      179 GTQFIRGVSGGERKRTSIGMELITDPSILFLDEPTTGLDSSSTANAVLLLLKRMSKQ-GRT 237
      | : | ||: ||| : : | | ||: | : ||| ||| : ||: | | | : | : | |
Db      523 GNEFDRGISGGEKRRVSIACELVTSPLVFLFDEPTSGLDASANNVIECLVRLSSDYNR 582

Qy      238 IIFSIHQPRYSIFKFLDSLTLASGRLMFHGPAQEALGYFESAGYHCEAYNPADFFLDI 297
      : : ||||| : : | | | | : : | : : : : : | : | | : | : | : |
Db      583 LVLSIHQPRSNIFYLFDKLVLLSKGEMVYSGNAKKVSEFLRNEGYICPDNYNIADYLIDI 642

Qy      298 -----INGDSTAV 305
      : |
Db      643 TFEAGPQGKRRIRNISDLEAGTDTNDIDNTIHQTTFSTSSDGTQREWAHLAHRDEIRS 702

Qy      306 ALNREEDFKATE----IIEPSKQDKPLIEKLAEIYVNSSFYKETKAEHLQ-LSGGEKKKK 360
      | ||| : : | | | : | : | : | : | : | : | : | : | : | : |
Db      703 LLRDEEDVEGTDGRRGATEIDLNTKLLHDK----YKDSVYYAELSQEIEEVLSEGDEESN 758

Qy      361 IT--VFKEISYTSFCHQLRWVSKRSFKNLLGNPQASIAQIIVTVVLGLVIGAIYFGLKN 418
      : : | | : : ||||| : || : : : : | : | : | : | : | : |
Db      759 VLNGDLPTGQSQAGFLQQLSILNSRSFKNMYRNPKNLLGNLYLLTILSLFLGTLYYVSN 818

```

Qy 419 DSTGIQNRAGVLFFLTINQCFSSSAVELFVVEKKLFIHEYISGYRVSSYFLGKLLSDL 478  
 | : | | | : | : | : : | : : : | | : | | : | : | : | :  
 Db 819 DISGFQNRMGLEFFILTYFGVFTGLSSFALERIIFIKERSNNYSPYAYISKIMSEV 878

Qy 479 LPMTMLPSIIFTICIVYFMLGLKPKADAFVMMFTLMMVAYSASSMALAIAAGQSVSVAT 538  
 : | : : | : : | | | | : | : | : | : | : | : : :  
 Db 879 VPLRVVPPILLSLIVPMTGLNMKDNAFFKICIGILFLNLGISELITIGIIFEDLNNIS 938

Qy 539 LLMTICFVFMFIFSGLLV---NLTTIASWSLWQYFSIPRYGFTALQHNEF----- 586  
 : | : : : | | | : | : | : | : | : | : | : | : | : | :  
 Db 939 ILSVLVLLGSLFSGLFINTKNITNVA--FKYLNKFSVFYYAYESLLINEVKTLMLKERR 996

Qy 587 LGQNF-CPGLNATGNPNPNYATCTGEEYLVKQGI--DLSPWGLWKNHVALACMIVIFLTI 643  
 | | : | | | | | | | | : | : | : | : | : | : | : | :  
 Db 997 YGLNIEVPG-----ATILSTFGFVVQNLVFDIK-----ILALFNVVFLIM 1036

Qy 644 AYLKLLFL 651  
 | | | : :  
 Db 1037 GYLALKWI 1044

## RESULT 8

US-09-619-049-264

; Sequence 264, Application US/09619049

; Patent No. 7135558

; GENERAL INFORMATION:

; APPLICANT: YANDELL, MARK

; TITLE OF INVENTION: ISOLATED DROSOPHILA PROTEINS ESSENTIAL

; TITLE OF INVENTION: FOR SURVIVAL, NUCLEIC ACID MOLECULES ENCODING ESSENTIAL

; TITLE OF INVENTION: DROSOPHILA PROTEINS, AND USES THEREOF AS INSECTICIDAL

; TITLE OF INVENTION: TARGETS

; FILE REFERENCE: CL000735

; CURRENT APPLICATION NUMBER: US/09/619,049

; CURRENT FILING DATE: 2000-07-18

; PRIOR APPLICATION NUMBER: 60/171,590

; PRIOR FILING DATE: 1999-12-23

; PRIOR APPLICATION NUMBER: 60/171,627

; PRIOR FILING DATE: 1999-12-23

; PRIOR APPLICATION NUMBER: 60/175,763

; PRIOR FILING DATE: 2000-01-12

; PRIOR APPLICATION NUMBER: 60/175,685

; PRIOR FILING DATE: 2000-01-12

; PRIOR APPLICATION NUMBER: 60/186,663

; PRIOR FILING DATE: 2000-03-03

; PRIOR APPLICATION NUMBER: 60/187,241

; PRIOR FILING DATE: 2000-03-03

; NUMBER OF SEQ ID NOS: 1533

; SOFTWARE: FastSEQ for Windows Version 4.0

; SEQ ID NO 264

; LENGTH: 687

; TYPE: PRT

; ORGANISM: DROSOPHILA  
US-09-619-049-264

Query Match 24.2%; Score 812; DB 3; Length 687;  
Best Local Similarity 32.1%; Pred. No. 6.3e-75;  
Matches 210; Conservative 134; Mismatches 251; Indels 60; Gaps 17;

Qy	5	NVEVFIPVSGQNTNGFPATASNDLKAFTEGAVLSFHNICYRVKLKSGFLPCRKPVEKEIL	64
		:::   ::    :     : :     :   :	
Db	74	NMDIFGAVNQ-----PGSGWRQLVNRIRGLFCNERHI-----PAPR---KHL	113
Qy	65	SNINGIMKPG-LNAILGPTGGGKSSLLDLVAARKDPSGL----SGDVLINGAPRPA-NFK	118
		:   :       : :     : :       :       :	
Db	114	KNVCGVAYPGELLAVMGSSGAGKTTLLNALAFR-SPQGIQVSPSGMRLNGQPVDAKEMQ	172
Qy	119	CNSGYVVQDDVVMGTLTVRENLFSAALRLATMTNHEKNERINRVIQELGLDKVADSKV	178
		: : :     :     : :   : :   : :       : :	
Db	173	ARCAIYVQDDLFIGSLTAREHLIFQAMVRMPRHLTYRQRVARVDQVIQELSLSKCQHTII	232
Qy	179	GTQ-FIRGVSGGERKRTSIGMELITDPSILFLDEPTTGLDSSTANAVLLLLKRMSKQGR	237
		: : :         :   :     :           : :   : : :   : :	
Db	233	GVPGRVKGLSGGERKRLAFASEALTDPELLICDEPTSGLDSFTAHSVVQVLKLSKQKGK	292
Qy	238	IIFSIHQPRYSIFKFLDSLTLASGRLMFHGPAQEALGYFESAGYHCEAYNNPADFFLDI	297
		:   :     : :     :   :     :     :     :   : :	
Db	293	VILTIHQPSSELFELFDKILLMAEGRVAFGLTGPSEAVDFFSYVGAQCPTNYPADFYVQV	352
Qy	298	INGDSTAVALNREEDFKATEIIEPSKQDKPLIEKLAEIYVNSSFFYKETKAELHLQSGGEK	357
		:       : : : : : :   :   : : :   :	
Db	353	L-----AVVPGREIESR-----DRIAKICDNFAISKVAR-DMEQLLATNK	391
Qy	358	KKKITVFEKISY--TSFCHQLRWVSKRSFKNLLGNPQASIAQIIVTVVLGLVIGAIYFG	415
		:                 :     : : :   : : : : :	
Db	392	LEKPLEQPENGYTYKATWFMQFRAVLWRSWLSVLKEPLLKVRLIQTMTVAIILIGLIFLG	451
Qy	416	LKNDSTGIQNRAGVLFLLTTNQCFSSVSA-VELFVVEKKLFIHEYISGYRVSYSYFLGKL	474
		:   :   :   :   :   :   :   :   :   :   :	
Db	452	QQLTQVGMNINGAIFLFLTNMTFQNVFATINVTSELVPVFMREARSRLRYCDTYFLGKT	511
Qy	475	LSDLLPMTMLPSIIFTCIVYFMLGLKPKADAFFVMMFTLMMVAYSASSMALAIAAGQSVV	534
		: :   : : : :     : :   : :   : :   : :	
Db	512	IAE-LPLFLTVPVLTFAIAYPMIGLRAGVLHFFNCLALVTLVANVSTSFGYLISCASSST	570
Qy	535	SVATLLMTICFVFMIFSGLLVNLTTIASWSLWLYFSIPRYGFTALQHNEFLGQNFPCG	594
		:   : : : :   : : :             : :	
Db	571	SMALSVGPPVPIIPFLFGGFFLNSGSPVYLKWSLSWFRYANEGLLINQWADVE--PG	628
Qy	595	-LNATGNNPCNYATCTGEEYLVKQGIDLSPWGLWKNHVALACMIVIFLTIAYLKL	648
		: :   :     : : : :     : :     :     :	
Db	629	EISCTSSN---TTCPSGKVILETLNFSAADLPLDYVGLAILIVSFRVLAYLAL	679

## RESULT 9

US-10-369-493-3799

; Sequence 3799, Application US/10369493

; Patent No. 7314974

; GENERAL INFORMATION:

; APPLICANT: Cao, Yongwei

; APPLICANT: Hinkle, Gregory J.

; APPLICANT: Slater, Steven C.

; APPLICANT: Goldman, Barry S.

; APPLICANT: Chen, Xianfeng

; TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF

; TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES

; FILE REFERENCE: 38-10(52052)B

; CURRENT APPLICATION NUMBER: US/10/369,493

; CURRENT FILING DATE: 2003-02-28

; PRIOR APPLICATION NUMBER: US 60/360,039

; PRIOR FILING DATE: 2002-02-21

; NUMBER OF SEQ ID NOS: 47374

; SEQ ID NO 3799

; LENGTH: 676

; TYPE: PRT

; ORGANISM: *Neurospora crassa*

US-10-369-493-3799

Query Match 23.7%; Score 795.5; DB 3; Length 676;

Best Local Similarity 31.2%; Pred. No. 3.2e-73;

Matches 199; Conservative 107; Mismatches 218; Indels 113; Gaps 11;

Qy	61	KEILSNINGIMKPG-LNAILGPTGGGKSSLLDLVLAARKDPFSGLSGDVLINGAP-RPANFK	118
		:   :   :   :   :   :   :   :   :   :   :   :   :   :   :	
Db	1	KEILSGIQGMAHPGEVTAIMGASGAGKTTFLDILARKKNRQGVSGDFYINGEKVSDPEYK	60
Qy	119	CNSGYVVQDDVVMGTLTVRENLFQSAALRLATMTNHEKNERINRVIQELGLDKVADSKV	178
		:   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :	
Db	61	NAVGFVDQEDTMLPTLVHETILNSALLRLPKDMTRAKEQRVIEVEKQLGIYHIRDSLI	120
Qy	179	GTQ--FIRGVSGGERKRTSIGMELITDPSILFLDEPTTGLDSSSTA-NAVLLLLKRMSKQG	235
		: :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :	
Db	121	GSEEGKGRGISGGEKRRVGIACELVTSPSILFLDEPTSGLDAYNAYNVVECLVTAKTYK	180
Qy	236	RTIIFSIIHQPRYSIFKFLDSLTLASGRLMFHGPAQEALGYFESAGYHCEAYNNPADFFL	295
		:   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :   :	
Db	181	RTVIFTIHQPRSNIVALFDRLILLAQGKTVYSGPLHQCEYFDQIGYTCPPGFNIADYLV	240
Qy	296	DI-----INGDSTAVALNREEDFKA-----TEIIEPS-----	322
		: : :   :   :   :   :   :   :   :   :   :   :   :   :   :   :	
Db	241	DLTMHAGSTSSYDDGTLVSDGVSVGPSSTRAVKSIASVSGVSGIGDDSLVESSSRPRNKR	300
Qy	323	-----KQDKPL-----	328
		: :	
Db	301	RDSVRRRQERELYTRRKQAVDTAASSDAGDEIGGYKLQKQPPVTPLRSTNDLHDLPLPLA	360

```

Qy      329 -----IEKLAIEYVNSSFYKETKAEHLQL-----SGGEKKKKITVFKEISYT----- 370
      : : | | : : | | : : | | : : | |
Db      361 ATGTDLDVLIIESYIHSDIAASTHEEIHQAIAAAVNSNGQNSNGYVADGNI-YTGTMGKGY 419

Qy      371 --TSFCHQLRWVSKRSKFNLLGNPQASIAQIIIVTVVLGLVIGAIYFGLKNDSTGIQNRAG 428
      | : | : : | | | : : : : | : | : : | | | | |
Db      420 ARVGLFRQFVILSQRTWKNLRYRNPMLMLTHYAIALLAVFAGYLFYGLTLDIAGFQNRNLG 479

Qy      429 VLFFLTITNQCFSSVSAVELFVVEKKLFIHEYISGYRVSSYFGLKLLSDLLPMTMLPSII 488
      : | : | : : : : | : | : | : | | : | : : : : | :
Db      480 LFFFLVALFGFSTLTSGLGVFSQERLLFVRERANGYYSPITYFAAKVLFDIVPLRIIPPIL 539

Qy      489 FTCIVFYMLGLKPKADAFFVMMFTLMMVAYSASSMALAIAAGQSVSVATLLMTICVFVM 548
      | : | | | | | : | : : | : | : | : | : | : |
Db      540 LGAIYPMTGLVADYQRFVFFILVLVLFNLAAAAICLFLGILCKDGGVANLIGSLVMLFS 599

Qy      549 MIFSGLLVNLTIIASWLSWLQYFISIPRYGFTALQHNE 585
      : : | : | : | : | : | : | | | | |
Db      600 LLFAGLLLNHNAIPAAALWLQWLSIFHYGFEALIVNE 636
  
```

# RESULT 10

US-09-538-092-1125

; Sequence 1125, Application US/09538092

; Patent No. 6753314

; GENERAL INFORMATION:

; APPLICANT: Giot, Loic

; APPLICANT: Mansfield, Traci A.

; TITLE OF INVENTION: Protein-Protein Complexes and Method of Using Same

; FILE REFERENCE: 15966-542

; CURRENT APPLICATION NUMBER: US/09/538,092

; CURRENT FILING DATE: 2000-03-29

; PRIOR APPLICATION NUMBER: 60/127,352

; PRIOR FILING DATE: 1999-04-01

; PRIOR APPLICATION NUMBER: 60/178,965

; PRIOR FILING DATE: 2000-02-01

; NUMBER OF SEQ ID NOS: 1387

; SOFTWARE: CuraPatSeqFormatter Version 0.9

; SEQ ID NO 1125

; LENGTH: 674

; TYPE: PRT

; ORGANISM: Homo sapiens

; FEATURE:

; NAME/KEY: misc\_feature

; LOCATION: (0)...(0)

; OTHER INFORMATION: Polypeptide Accession Number P45844

US-09-538-092-1125

```

Query Match          21.1%; Score 706.5; DB 2; Length 674;
Best Local Similarity 28.4%; Pred. No. 6.5e-64;
Matches 194; Conservative 155; Mismatches 251; Indels 83; Gaps 23;
  
```



Qy	3	SSNVEVFIPVSGQNTNGFPATASNDL---KAFT----EGAV-LSFHNICYRVKLKSGFLP	54
Db	34	SSNMEA---TETDLNLNGHLKKVDNNLTEAQRFFSSLPRAAVNIEFRDLSYSVPEGPWW--	88
Qy	55	CRKPVEKEILSNINGIMKPG-LNAILGPTGGGKSSLLDVLAAKDKPSGLSGDVLINGAPR	113
Db	89	-RKKGYKTLKKGISGFNSGELVAIMGPSGAGKSTLMNILAGYRE-TGMKGAVLINGLPR	146
Qy	114	PAN-FKCNSGYVQDDVVMGTLTVRENLFQSAALRLATTMTNHEKNERINRVIQELGLDK	172
Db	147	DLRCFRKVSICYIMQDDMLLPHLTQVEAMMVAHLKLQE---KDEGRREMVKELITALGLLS	204
Qy	173	VADSKVGTQFIRGVSGGERKRTSIGMELITDPSILFLDEPTTGLDSSTANAVLLLLKMS	232
Db	205	CANTRTGS-----LSGGQRKRLAIALELVNPPVMMFFDEPTSGLDSASCQVVSMLMKGLA	259
Qy	233	KQGRTIIFSISHPQPRYSIFKFLDSLTLASGRMLFHGPAQEALGYFESAGYHCEAYNNPAD	292
Db	260	QGGRSIICTIHQPSAKLFEFLDQLYVLVQQGCQVYRGKVCNLVPLRDLGLNCPITYHNPAD	319
Qy	293	FFLDIINGDSTAVALNREEDFKATEIIEPSKQDKPLIEKLAEIYVNSSFYKET--KAEL-	349
Db	320	FVMEVASG-----EYGDQNSRLVRVREGMCDSDHKRDLGGDAEVN	360
Qy	350	----HQLSGGEKK-KKITVFKEISYTTSFCH-----QLRWVSKRSFKNLLGNPQASI	396
Db	361	PFLWHRPSEEVKQTKRLKGLRKDSSSMGCHSFSASCLTQFCILFKRTFLSIMRDSVLTH	420
Qy	397	AQIIIVTVVLGLVIGAIYFGLKNDSTGIQNRAGVLFLLTTNQCFSSVSAREL-FVVEKKLF	455
Db	421	LRITSHIGIGLLIGLLYLGIGNEAKKVLNSGFLFFSMLFLMFAALMPTVLTFPLEMGVF	480
Qy	456	IHEYISGYRVSSYFLGKLLSDLLPMTMLPSIIFTCIVYFMLGLKPKADAFFVMMFTL-M	514
Db	481	LREHLNYYWSLKAYYLAKTMAD-VPFQIMFPVAYCSIVYWMTS-QPSDAVRFLFAALGT	538
Qy	515	MVAYSASSMALAIAAGQSVSVATLLMTICVFMMIFSGLLVNLTTIASWLSWLQYFSIP	574
Db	539	MTSLVAQSLGLLIGAASTSLQVATFVGVPVTAIPVLLFSGFFVSFDTIPTYLQWMSYISYV	598
Qy	575	RYGFT-----ALQHNEFLGQNFPCPLNATGNNPCNYATCTGEEYLVKQGIDLSPWGLW	627
Db	599	RYGFEGVILSIYGLDRED-----LHCDIDETCHFQK---SEAILRE-LDVENAKLY	645
Qy	628	KNHVALACMIVIFLTIAYLKLFF	650
Db	646	LDFIVLGIFFISLRLIAYFVLRY	668

RESULT 11

US-10-473-696-6

; Sequence 6, Application US/10473696

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; Patent No. 7211563
; GENERAL INFORMATION:
; APPLICANT: DeveloGen AG for entwicklungsbiol. Forschung
; TITLE OF INVENTION: Protein disulfide isomerase and ABC transporter
; TITLE OF INVENTION: homologous proteins involved in the regulation of
; TITLE OF INVENTION: energy homeostasis
; FILE REFERENCE: 24941PWO_RI
; CURRENT APPLICATION NUMBER: US/10/473,696
; CURRENT FILING DATE: 2003-09-29
; PRIOR APPLICATION NUMBER: EP01108315.1
; PRIOR FILING DATE: 2001-04-02
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 663
; TYPE: PRT
; ORGANISM: Human
US-10-473-696-6

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Query Match          21.0%; Score 702.5; DB 3; Length 663;
Best Local Similarity 28.4%; Pred. No. 1.6e-63;
Matches 193; Conservative 153; Mismatches 246; Indels 87; Gaps 23;

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Qy      3 SSNVEVFIPVSGQNTNGFPATASNDL---KAFT---EGAV-LSFHNICYRVKLKSGFLP 54
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Db     35 SSNMEA---TETDLLNGHLKKVDNNLTEAQRFSLLPRRAAVNIEFRDLSYSVPEGPWW-- 89

Qy     155 CRKPEVEKEILSNINGIMKPG-LNAILGPTGGGKSSLLDVLAAARKDPSGLSGDVLINGAPR 113
      ||      |:|      |:|      ||:|:|:|      ||:|:|:|      ||:|:|:|
Db     90 -RKKGYKTLKLGISGKFNSGELVAIMGPSGAGKSTLMNLAGYRE-TGMKGAVLINGLPR 147

Qy     114 PAN-FKCNISGYVQDDVVMGTLTVRENLQFSAALRLATTMTNHEKNERINRVIQELGLDK 172
      |:|      |:|:|:|:|:|      |:|:|      |:|      |:|      |:|
Db     148 DLRCFRKVCYIMQDDMLLPHLTVQEAMMVSAHLKLQE---KDEGRREMVKEILTALGLLS 205

Qy     173 VADSKVGTQFIRGVSGGERKRTSIGMELITDPSILFLDEPTTGLDSSANAVLLLLKRMS 232
      |:|:|      |:|      |:|:|:|:|      |:|:|:|      |:|:|:|:|      |:|:|:|
Db     206 CANTRTGS-----LSGGQRKRLATALELVNPPVMVFDEPTSGLDSASCFQVVSMLMKGLA 260

Qy     233 KQGRTIIFSIHQPRYSIFKLFDSLTLASGRLMFHGPAQEALGYFESAGYHCEAYNNPAD 292
      |:|:|:|      |:|:|:|      |:|:|:|      |:|:|:|      |:|      |:|:|:|
Db     261 QGGRSIICTIHQPSAKLFELFDQLYVLSQGCQVYRGKVCNLVPYLRDLGLNCPYTHNPAD 320

Qy     293 FFLDIINGDSTAVALNREEDFKATEIIEPSKQDKPLIEKLAEIYVNSSFFYKETKAELHQL 352
      |:|:|      |:|      |:|:|:|      |:|:|:|      |:|      |:|:|:|
Db     321 FVMEVASG-----EYGDQNSRLVRVREGMCDS----DHKRDL--- 354

Qy     353 SGGEKKKKITVF----KEISYTTSFCH-----QLRWVSKRSFKNLLGNPQASIAQII 400
      |:|:|      |:|      |:|:|:|      |:|      |:|:|:|:|:|      |:|:|
Db     355 -GGDAEVNPFLLWHRPSEEDSSMEGCHSFSASCLTQFCILFKRTFLSIMRDSVLTLHLRIT 413

Qy     401 VTVVLGLVIGAIYFGLKNDSTGIQNRAGVLFLLTTNQCFSSVSAVEL-FVVEKKLFIHEY 459

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      : :||:| | : | :| : : : | || | | : : : | | : | :| : | :
Db      414 SHIGIGLLIGLLYLGLIGNEAKKVLNSGFLFFSMLFLMFAALMPTVLTFPLEMGVFLREH 473

Qy      460 ISGYRYVSSYFLGKLLSDLLPMTMLPSIIFTICIVYFMLGLKPKADAFVMMFTL-MMVAY 518
      : : : | : :| | | :| : | : : : : | | : | | : | :
Db      474 LNYWYSLKAYYLAKTMD-VPFQIMFPVAYCSIVYWMTS-QPSDAVRVFLFAALGTMTSL 531

Qy      519 SASSMALAIAAGQSVSVSATLLMTICFVMMIFSGLLVNLTTIASWLSWLQYFSPRYGF 578
      | | : | | | : : || : : : :|| | | : | | : | | | |
Db      532 VAQSLGLLIGAASTSLQVATFVGVPVTAIPVLLFSGFFVSFDTIPTYLQWMSYISYVRYGF 591

Qy      579 T-----ALQHNEFLGQNFPCPLNATGNNPCNYATCTGEEYLVKQGIDLSPWGLWKNHV 631
      | : | : | : | : | : | : : : | : : : | : : :
Db      592 EGVILSIYGLDRED-----LHCDIDETCHFQK---SEAILRE-LDVENAKLYLDFI 638

Qy      632 ALACMIVIFLTIAYLKLLF 650
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Db      639 VLGIFFISLRLIAYFVRLY 657

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# RESULT 12

US-11-567-079-6

; Sequence 6, Application US/11567079

; Patent No. 7404952

; GENERAL INFORMATION:

; APPLICANT: DeveloGen AG fur entwicklungsbiol. Forschung

; TITLE OF INVENTION: Protein disulfide isomerase and ABC transporter

; TITLE OF INVENTION: homologous proteins involved in the regulation of

; TITLE OF INVENTION: energy homeostasis

; FILE REFERENCE: 24941PWQ\_RI

; CURRENT APPLICATION NUMBER: US/11/567,079

; CURRENT FILING DATE: 2006-12-05

; PRIOR APPLICATION NUMBER: EP01108315.1

; PRIOR FILING DATE: 2001-04-02

; NUMBER OF SEQ ID NOS: 21

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 6

; LENGTH: 663

; TYPE: PRT

; ORGANISM: Human

US-11-567-079-6

Query Match 21.0%; Score 702.5; DB 3; Length 663;

Best Local Similarity 28.4%; Pred. No. 1.6e-63;

Matches 193; Conservative 153; Mismatches 246; Indels 87; Gaps 23;

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Qy      3 SSNVEVFIPVSGQNTNGFPATASNDL---KAFT---EGAV-LSFHNICYRVKLKSGFLP 54
      |||:| | | | :| : | : | : | : | : | :
Db      35 SSNMEA---TETDLLNGHLKKVDNNLTEAQRFSSLPRAAVNIEFRDLSYSVPEGPWW-- 89

Qy      55 CRKPVEKEILSNINGIMKPG-LNAILGPTGGGKSSLLDVLAARKDPSSGLSGDVLINGAPR 113
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; APPLICANT: Tian, Hui

Query Match 20.7%; Score 693.5; DB 2; Length 652;  
Best Local Similarity 29.0%; Pred. No. 1.4e-62;  
Matches 181; Conservative 142; Mismatches 246; Indels 55; Gaps 16;

Qy		12	VSQGNTINGFPATASNDLKAFTEGAVLSFNHCYRVKLKSG----	FLPCRKPVEKEILSNI	67
			:   :         : ::     :   :	: ::   :   :	
Db		25	LEQGSVTGTGEARHS-----	LGVLHVSYSVSNRVPWWNIKSCQQKWDRQILKDV	73
Qy		68	NGIMKPG-LNAILGPTGGGKSSLLDVLAAKDPSPG-LSGDVLINGAP-RPANFKNSGYV	124	
			: ::   :   :     ::    :   :   :   :       :	:	
Db		74	SLYIESGQMCI LGSSSGSKTTL LLD AISGR LR TLTGLEGEVF VNGCELRR DQF QDCFS YV	133	
Qy		125	VQDDVVMGTLTVREN LQFSAALRLATTMTNH EKNERIN RV IQLGLDKVADSVKGVTQ FIR	184	
			:     : :        ::     : : : :   :           :	:	
Db		134	LQSDVFLSSLTVRETR LRYTAMLALCRSSADF-YNK KVEAVMTELSLSHVADQMIGSYNFG	192	
Qy		185	GVSGERKRTSIGMELITDPS ILFDEPTTGLDSSTANAVLLL KRMSKQRTIIFS IHQ	244	
			:       :     :  :     :              :      :: :   :   :	:	
Db		193	GISSGERRRVSIAAQL LQDPKMMLDEPTTGLDCMTANQIVLL LAELARRDRIVITIHQ	252	
Qy		245	PRYSIFKLFD S LTLASGRLMFHGPAQEALGYFESAGYHCEAYNNPADFFLDI ING DSTA	304	
			:  :     : :      :     :       :      ::  : :   :	:	
Db		253	PRSELFQHFDKIAILTYGELVFCGTPEEMLGF FN NCGYPCPEHSNPFD FYMDL TSVDQT-	311	
Qy		305	VALNRE-EDFKATEII EPSKD KPLIEKLAEIYVN SSFYKETAEHLQLSGGKKKKITV	363	
			:       :   ::  : : :   :	: : :	
Db		312	-SREREIETYKRVQMLECAF KESDIYHKI-----	LENIERARYLKT	351
Qy		364	FKEISYTT----SFCHQLRWVSKRSFKNLGNPQASIAQIIVTVVLGLVIGAIYFGLKND	419	
			: :   :   :   :   :       : : :     :   :	:	
Db		352	LPMVPFKTKDPPGMFGKLV LLRRVRTNLRNKOAVIMRLVONLIMGLFLIFYLLRVONN	411	

US-09-837-992-1

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; Sequence 1, Application US/09837992
; Patent No. 7033810
; GENERAL INFORMATION:
; APPLICANT: Tian, Hui
; APPLICANT: Schultz, Joshua
; APPLICANT: Shan, Bei
; APPLICANT: Tularik Inc.
; TITLE OF INVENTION: Sitosterolemia Susceptibility Gene (SSG): Compositions
; TITLE OF INVENTION: and Methods of Use
; FILE REFERENCE: 018781-006020US
; CURRENT APPLICATION NUMBER: US/09/837,992
; CURRENT FILING DATE: 2001-04-18
; PRIOR APPLICATION NUMBER: US 60/198,465
; PRIOR FILING DATE: 2000-04-18
; PRIOR APPLICATION NUMBER: US 60/204,234
; PRIOR FILING DATE: 2000-05-15
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 652
; TYPE: PR1
; ORGANISM: Mus musculus
; FEATURE:
; OTHER INFORMATION: mouse sitosterolemia susceptibility gene (SSG)
; OTHER INFORMATION: amino acid sequence
US-09-837-992-1

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Query Match 20.7%; Score 693.5; DB 3; Length 652;  
Best Local Similarity 29.0%; Pred. No. 1.4e-62;  
Matches 181; Conservative 142; Mismatches 246; Indels 55; Gaps 16;

Qy 12 VSQGNINGFPATASNDLKAFTEGAVLSFHNNICYRVKLKSG----FLPCRKPVEKEILSNI 67  
: ||| | | :| :| ::||| :

; APPLICANT: Tularik Inc.

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Db      352 LPMVPFKTKDPPGMFGKLGVLRLRVTRNLMRNKQAVIMRLVQNLIMGLFLIFYLLRVQNN 411
Qy      420 ST--GIQNRAVLFFLTNNQCFSS-VSAVELFVVEKKLFIHEYISGYRVSSYFLGKLLS 476
      :      :|:| | |:| :      :: :| | | : : :      |      |      |      :|
Db      412 TLKGAVQDRVGLLYQLVGATPYTGMLNAVNLFPMLEAVSDQESQDGLYHKWQMLLAYVL- 470
Qy      477 DLLPMTMLPSIIFTCIVYFMLGLKPKADAFFVMMFTLM--MVAYSASSMALAIAAGQSV 533
      :| | :: :| | : : | | | | :      |      | :      ::      : : | |      ::
Db      471 HVLPSFVIATVIFSSVCYWTGLYPEVARFGYFSAALLAPHLIGEFLTLVLLGIVQNPNI 530
Qy      534 VSVATLLMTICFVFMFMIFSGLLVNLTIIASWLSWLQYFISIPRYGFTALQHNEFLGQNF-C 592
      | :      | :| :      :| | | : | : :      |      | | :      :|      | | | | | |
Db      531 VNSIVALLSIS--GLLIGSGFIRNIQEMPIPLKILGYFTFQKYCCILVNEFYGLNFTC 588
Qy      593 PGLNATGNNPCNYATCTGEEYLVK 616
      | | :      |      |      | : : |
Db      589 GGSNTSMLNHPMCAITQGVQFIEK 612

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